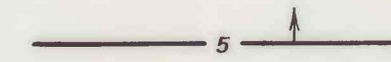




NON-FEDERAL COAL LAND—Land for which the Federal Government does not own the coal rights.



ISOPACH—Showing thickness of coal, in feet. Arrow points toward area where coal bed is 5 feet or more thick.



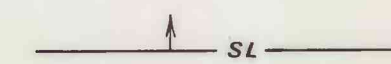
TRACE OF COAL BED OUTCROP—Showing symbol of name of coal bed. Arrow points toward coal-bearing area. Dashed where inferred by present authors; dotted where concealed.

INSUFFICIENT DATA LINE—Coal resources were not calculated for areas beyond line shown because of insufficient data.



FAULT—Bar and ball on downthrown side where direction of movement is known.

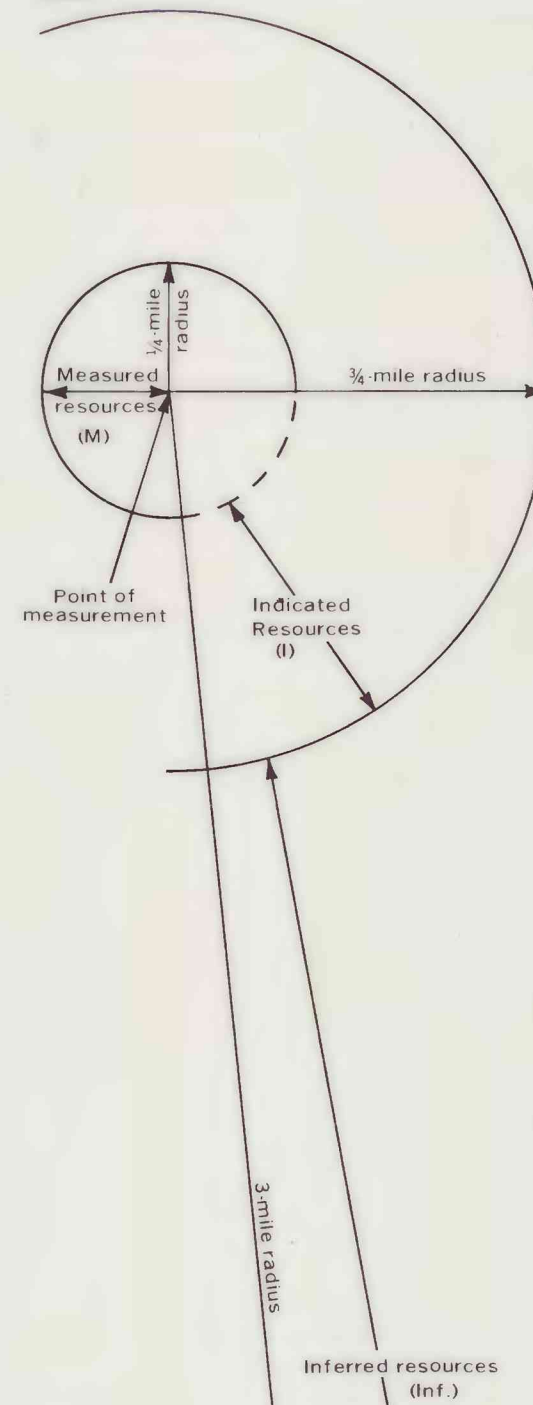
SUBSURFACE MINING LINE—Showing areas where dips of coal beds are greater than 15° and subsurface mining is not considered feasible. Arrow points toward areas where dips are greater than 15°.



STRIPPING-LIMIT LINE—Boundary for surface mining (in this quadrangle, the 200-foot-overburden isopach). Arrow points toward the area suitable for surface mining where the recovery factor is 85 percent, and away from the area suitable for subsurface mining (down dip to the 3,000-foot-overburden isopach) where the recovery factor is 50 percent.

Surface	Subsurface	
RB R(85%)	RB R(50%)	(Measured)
0.7	0.6	4.8
0.6	0.5	8.4
—	—	(Inferred)

IDENTIFIED COAL RESOURCES—Showing totals for Reserve Base (RB) and Reserves (R), in millions of short tons, for each section or part of section of non-leased Federal coal land, both within and beyond the stripping-limit line. Reserve (R) tonnage is calculated by multiplying the Reserve Base (RB) tonnage by the appropriate recovery factor. Dash indicates no resource in that category. Underground Reserves have been calculated for only that part of the Reserve Base that is suitable for underground mining, and do not include Reserves for areas where the dip of the coal bed exceeds 15°. Also, Reserves have been calculated for a constant thickness of 12 feet for areas where the coal beds are more than 12 feet thick. Therefore, in some instances, underground Reserves may be less than 50 percent of the Reserve Base.



BOUNDARY LINES—Enclosed areas of measured, indicated, and inferred coal resources of the coal bed. Dashed where projected from adjacent quadrangles.

To convert short tons to metric tons, multiply short tons by 0.9072.
To convert feet to meters, multiply feet by 0.3048.

